

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1"



ZUBKOV, V.I.; MONOSOV, Ya.A.

Amplification of microwave oscillations having a frequency  
higher than the pumping frequency by means of ferrites; theory.  
Radiotekh. i elektron 7 no.7:1140-1151 '62. (MIRA 15:6)  
(Microwaves) (Ferrites)

BP

ACCESSION NR: AP4033130

S/0120/64/000/002/0127/0128

AUTHOR: Zubkov, V. I.

TITLE: Mass-spectrometer range switch

SOURCE: Pribery\* i tekhnika eksperimenta, no. 2, 1964, 127-128

TOPIC TAGS: spectrometer, mass spectrometer, mass spectrometry

ABSTRACT: A new device which permits the automatic changing of magnetic-field subranges during the course of an experiment extending over more than one subrange is described. The device consists of two ShI-11 step-by-step switches, seven tumbler switches for selecting the specific subranges for the upcoming experiment, an SD-2 motor, a push switch, a rectifier, and indicating neon tubes. A simplified circuit diagram is explained in the article. "The author wishes to thank M. V. Tikhomirov for his attention and discussion of the work, and also A. M. Ivanov for his help in building the device." Orig. art. has: 2 figures.

ASSOCIATION: none

SUBMITTED: 28Aug62

DATE ACQ: 11May64

ENCL: 00

SUB CODE: PH

NO REF.SOV: 000

OTHER: 000

Card 1/1

ZUBKOV, V.I.

Device for automatic switching of a mass spectrometer. 1 rrb.  
1 tekhn. eksp. 9 no. 2.127-128 Prilap'64. (MIRA 17:5)

10943

S/109/62/007/007/011/018  
D271/D308

9.25/21

AUTHORS: Zubkov, V. I. and Monosov, Ya. A.

TITLE: Amplification of UHF oscillations whose frequency is higher than the pumping frequency using ferrites (Theory)

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 7, 1962, 1140-1151

TEXT: Parametric excitation in ferrites is analyzed, with emphasis on higher than pumping frequencies; the pumping field is parallel to the magnetizing field; new possibilities of amplification and of converting lower frequencies into higher than pumping frequencies are investigated. A spherical ferrite body is magnetized along its Oz axis, and the magnetic field at pumping frequency  $\omega_0$  is linearly polarized along the same axis. Fundamental field equations lead to an infinite system of differential equations for magnetostatic potentials; these are solved using Legendre functions and a system

Card 1/3

Amplification of UHF ...

S/109/62/007/007/011/018  
D271/D308

of equations is obtained which describes a parametrically coupled oscillating system with an infinite number of degrees of freedom. An equivalent system of RLC circuits is given. The threshold of parametric excitation and the tuning conditions are obtained from the above equations taking into account ferrite losses. The relationship between the threshold level and tuning conditions is discussed and it is concluded that higher than pumping frequencies cannot be separated from self-oscillations, unless auxiliary circuits are used, e.g. based on selective properties of the resonator in which the ferrite is placed. Amplification of below-pumping frequencies, conversion of below-pumping to above-pumping frequencies and amplification of above-pumping frequencies are compared and it is found that the effect decreases in the above order. The possibility of conversion to higher than pumping frequencies, making use of resonator selectivity, is analytically investigated and it is shown that the conversion factor is generally much smaller than the amplification coefficient although a judicious choice of parameters permits a lossless conversion. The frequency of particular interest is the lowest of the possible frequencies which

Card 2/3

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1"

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1"



APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1"

ZUEKOV, V.I.; TIKHOMIROV, M.V.; ANDRIANOV, K.A., akademik; GOLUBTSOV, S.A.

Mass spectrometric study of intermediate products of the reaction of silicon with copper monochloride. Dokl. AN SSSR 159 no.3: 599-601 N '64 (MIRA 18: 1)

М. А. Малафеев

Устройство автоматизированной системы управления полетом

10 страниц

(с 18 до 22 частей)

Д. М. Востриков.

Р. А. Гринюков

Автоматизированная система в виде управляющей системы для ЛБД

С. Г. Константинов

Оптимизация системы с обратной связью

М. М. Ефимов

М. М. Галкин

М. М. Калашов

М. М. Митин

Исследование автоматизированной системы в структуре автоматизированной системы СВЧ с помощью системы для построения траекторий заданных точек

Г. А. Мухомов

С. А. Мухомов

Автоматизированная система для управления полетом с обратной связью автоматизированной системы

34

11 страниц

(с 10 до 16 частей)

Система управления с обратной связью для системы СВЧ

М. М. Ефимов, М. С. Мухомов

Исследование системы управления параметрами СВЧ

А. Н. Тихонов

К теории формирования сигнала

А. Н. Тихонов

М. Т. Дрозд

М. В. Карачев

Исследование системы управления параметрами СВЧ

А. Н. Мухомов

М. А. Мухомов

Исследование системы управления параметрами СВЧ

А. С. Увар

К теории формирования сигнала в автоматизированной системе

35

report submitted for the Confidential Meeting of the Scientific Technological Society in  
Radio Engineering and Electrical Communications No. A. S. Paper (VKhE), Moscow,  
6-12 June, 1959

М. А. Цуканов,  
М. М. Шестов

О системе защиты связи по ферритовым  
сторонам магнитов

18. СЕКЦИЯ ФЕРРИТОВЫХ УСТРОЙСТВ СВЧ

Руководитель А. А. Мухомов

11 июня

(с 10 до 18 часов)

Совместное заседание и чтение докладов

М. А. Цуканов,  
М. М. Шестов

Изучение системы защиты параметрических усилителей

В. П. Тучков

К теории ферритовых усилителей

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

В. П. Тучков

А. А. Мухомов,  
М. М. Шестов

Изучение результатов исследования ферритовых  
усилителей

А. С. Тучков

К теории параметрических усилителей в ферритовых  
сторонах

11 июня

(с 18 до 22 часов)

А. А. Мухомов,  
М. М. Шестов

Изучение свойств параметрических усилителей в ферритовых  
сторонах

А. А. Мухомов

В. П. Тучков

Свойства параметрических усилителей в ферритах

А. А. Мухомов

А. А. Мухомов

О ферритовых усилителях параметрического типа

А. А. Мухомов

М. М. Шестов

Применение ферритов для улучшения свойств  
магнетронных антенн

Report submitted for the Confidential Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications in. A. S. Paper (YUZH), Moscow,  
0-12 June. 1959

Contributor to the theory of parametric systems with periodically  
varying resistance, inductance, and capacitance. Radiotekh. i  
elektron. 11 no.1:103-110 Ja '66.  
(MIRA 19:1)

1. Submitted September 24, 1964.

9.2590

77194  
SOV/109-5-1-7/20

AUTHORS: Zubkov, V. I., Monosov, Ya. A.

TITLE: ~~Some Problems in the Theory of Parametric Amplifiers~~  
Some Problems in the Theory of Parametric Amplifiers

PERIODICAL: Radiotekhnika i elektronika, 1960, Vol 5, Nr 1, pp 75-89 (USSR)

ABSTRACT: In the study, the natural frequencies (frequencies of parametric coupling) and resonance curves of parametrically coupled circuits are investigated. (1) Oscillations in parametrically connected systems. The system shown in Fig. 1a is under discussion. Circuits 1, 2, and 3 are named signal, auxiliary, and boosting circuits, respectively, just as in Reference (4) of this abstract. Let  $\omega_1$  be the frequency of the generator,  $\omega_2$  be the frequency of emf in the auxiliary circuit, and let  $\omega_3$  be the frequency of the pumping generator. Then, the following set of equations holds:

Card 1/16

Some Problems in the Theory of Parametric  
Amplifiers

77194  
SCV/109-5-1-7/20

$$\begin{aligned}V_1 &= I_1(R_1 + jX_1) - j\omega_1 L_0 I_3 I_2^*, \\V_2 &= I_2(R_2 + jX_2) - j\omega_2 L_0 I_3 I_1^*, \\V_3 &= I_3(R_3 + jX_3) - j\omega_3 L_0 I_1 I_2^*,\end{aligned}\quad (1)$$

where  $L_0$  is the nonlinear inductance;  $R_i$ ,  $L_i$ ,  $C_i$  will represent sums of all linear parameters of the corresponding circuit. Equations (1) hold under the assumptions that:

$$\omega_1 + \omega_2 = \omega_3. \quad (2)$$

and that for  $\omega_1^i$  and  $\omega_2^i$  no multiple ratio exists. Assuming that  $I_3 \gg I_1$  and  $I_3 \gg I_2$ , the following set of equations is given:

Card 2/16

Some Problems in the Theory of Parametric  
Amplifiers

77194  
SOV/100-5-1-7/20

$$\left. \begin{aligned} V_1 &= I_1(R_1 + jX_1) - j\omega_1 L_0 I_3 I_2^* \\ V_2 &= I_2(R_2 + jX_2) - j\omega_2 L_0 I_3 I_1^* \end{aligned} \right\} \quad (3)$$

This system of equations is linear with respect to currents  $I_1$  and  $I_2$ . Figure 1b shows the equivalent diagram of the system described by Eqs. (3). Inductance coupling these circuits changes periodically with frequency  $\omega_3$ . The system of Eqs. (3) is similar to equations for currents in ordinary coupled circuits if  $L_0 |I_3|$  is taken as coupling inductance. In the absence of parametric coupling the natural frequencies of circuits are called "partial frequencies" and are denoted by  $\omega_1$ . In the presence of the parametric coupling, they are called "frequencies of parametric coupling," and are denoted as  $\omega_{1c}$ . (a) Frequencies of parametric coupling. In order to determine the

Card 3/16



Some Problems in the Theory of Parametric  
Amplifiers

7719/4  
30V/107-5-1-7/20

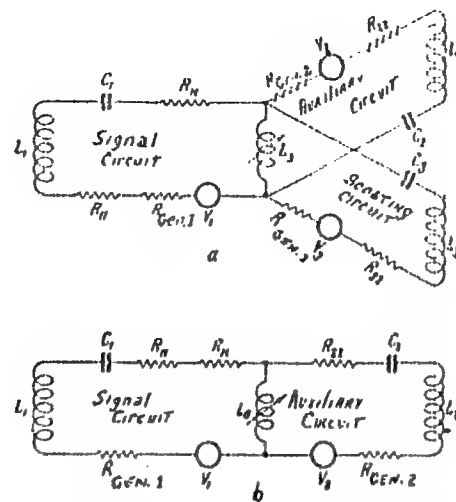


Fig. 1. Equivalent diagrams for the three-circuit (a) and two-circuit (b) parametric amplifiers.

Card 4/16

Some Problems in the Theory of Parametric  
 Amplifiers

77194  
 SOV/109-5-1-7/20

frequencies of parametric coupling; the determinant of  
 Eq. (3) taken with respect to the unknowns  $I_1$  and  $I_2$   
 is equaled to zero. Assuming that the parametric  
 coupling is small and that its frequencies differ little  
 from the partial frequencies, the following equations  
 for the frequencies of the parametric coupling are  
 obtained:

$$\left. \begin{aligned} \omega_{1c} &= \frac{\omega_3 + \omega_1 - \omega_2}{2} \pm \frac{1}{2} \sqrt{(\omega_3 - \omega_1 - \omega_2)^2 - k^2 \omega_1 \omega_2} \\ \omega_{2c} &= \frac{\omega_3 - \omega_1 + \omega_2}{2} \pm \frac{1}{2} \sqrt{(\omega_3 - \omega_1 - \omega_2)^2 - k^2 \omega_1 \omega_2} \end{aligned} \right\} \quad (4)$$

where

$$k^2 = \frac{I_0^2 I_3^2}{I_1 I_2}.$$

Some Problems in the Theory of Parametric  
 Amplifiers

77194  
 SOV/10J-5-1-7/20

For the particular case when  $\omega_1 + \omega_2 = \omega_3$  Eqs.  
 (9) are transformed into:

$$\left. \begin{aligned} \omega_{1c} &= \omega_1 \pm j \frac{k}{2} \sqrt{\omega_1 \omega_2} \\ \omega_{2c} &= \omega_2 \pm j \frac{k}{2} \sqrt{\omega_1 \omega_2} \end{aligned} \right\} \quad (10)$$

The general case is discussed when the sum  $\omega_1 + \omega_2$   
 differs from  $\omega_3$ , but is sufficiently near  $\omega_3$ .

The following definitions are introduced: The differ-  
 ence between the boosting frequency and the sum of the  
 partial frequencies is called "the absolute tuning  
 out," and the quantity:

$$\Delta_{1,2} = 2 \frac{\omega_3 - (\omega_1 + \omega_2)}{\omega_{1,2}}$$

Card 6/16

Some Problems in the Theory of Parametric  
Amplifiers

77-97  
207/100-5-1-7/86

is called "the relative tuning out." Frequencies of the parametric coupling calculated on the basis of Eq. (9) are shown in Fig. 1, as function of retuning the signal circuit  $\omega_1$  by the pumping constant

frequencies and through auxiliary circuits. On the supplementary abscissa axis, relative tuning out is marked, and on the supplementary ordinate axis, detuning is shown. The parametric coupling shown in Fig. 2 is constant. When the tuning out decreases, the frequencies of parametric coupling are displaced with respect to the partial frequencies. The maximum difference between the coupling and the partial frequencies takes place at condition:

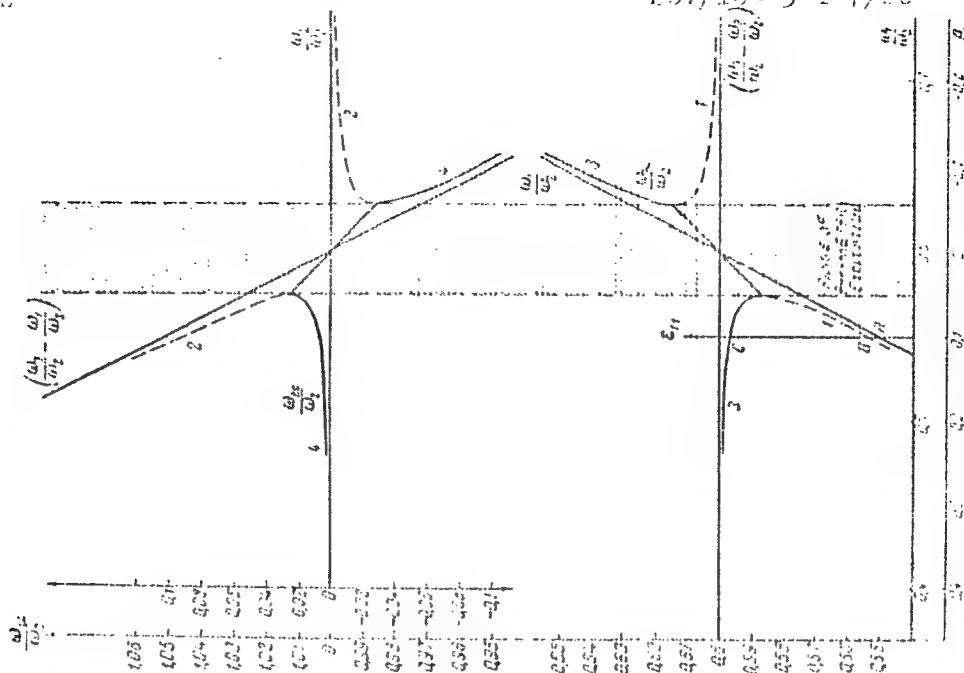
$$(\omega_1 - \omega_1 - \omega_2)_{\text{resonance}} = K_{\text{resonance}} \sqrt{\omega_1 \omega_2} \quad (11)$$

Card 7/16

Some Problems in the Theory of Parametric  
 Amplifiers

7719<sup>h</sup>  
 207/194-5-1-7/80

Card 8/10



Some Problems In the Theory of Parametric  
Amplifiers

77194

504/109-5-1-7/20

Fig. 2. Frequencies of parametric coupling as functions  
of natural frequency of the signal circuit. Para-  
meter values:  $k = 0.05$ ;  $\omega_3 / \omega_2 = 1.6$ .

Caption for Fig. 2.

Some Problems in the Theory of Parametric  
Amplifiers

77194

SOV/109-5-1-7/20

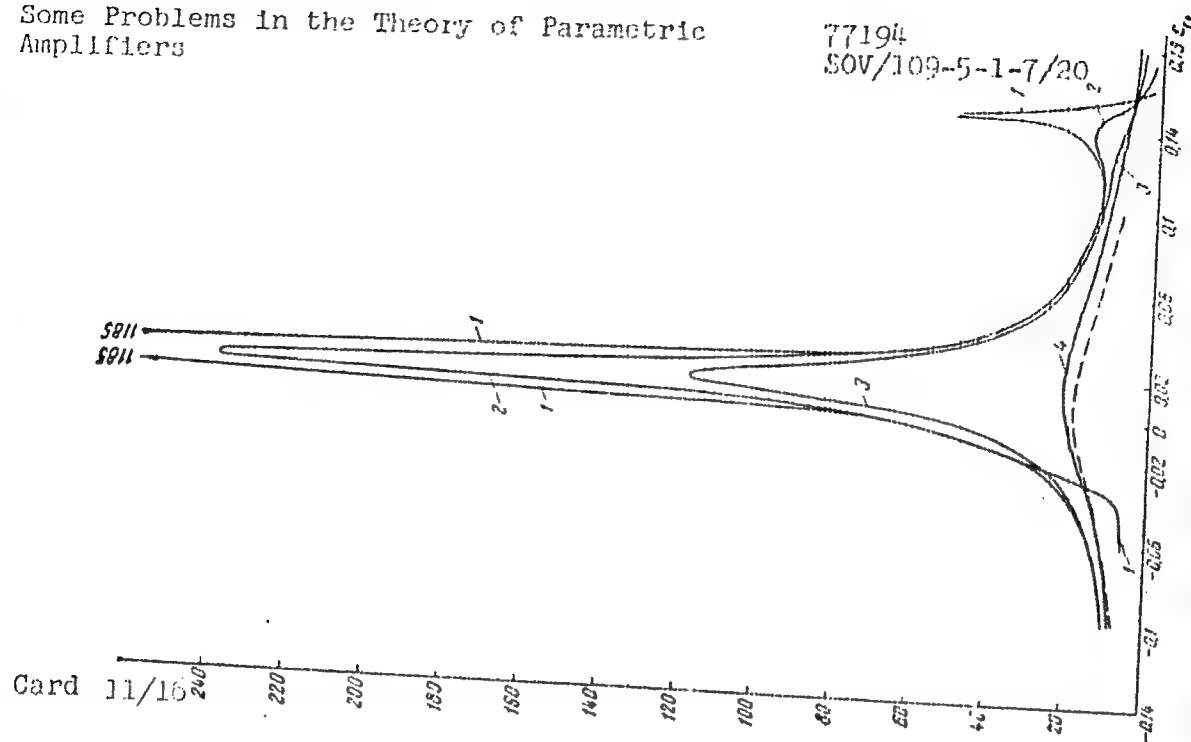
The tuning out and the coupling satisfying Eq. (11) are called threshold tuning out and threshold coupling. (b) Resonance curves of the signal circuit. The resonance curves of currents in the parametrically coupled circuits are discussed. The set of Eqs. (3) is solved on the assumption that  $V_2 = 0$ . Two cases are discussed: In the first case, the analysis is made for the condition represented by Eq. (2). In the second case, an analysis is made for the general condition  $\omega_1 + \omega_2 \approx \omega_3$ . Figures 3 and 4 give plots of current in the signal circuit as function of retuning frequency of the generator with respect to frequency of the circuit 1. (c) Resonance curves of the auxiliary circuit. The method of analysis is similar to that shown under (b). Two cases are also discussed: In the first case, the sum of the partial frequencies is equal to the pumping frequency ( $\beta_{1,2} = 0$ ); in the second case, the sum of the partial frequencies differs from the pumping frequency ( $\omega_1 + \omega_2 \approx \omega_3$ ). Two resonance curves

Card 10/16

Some Problems in the Theory of Parametric  
Amplifiers

77194

SOV/109-5-1-7/20





Some Problems In the Theory of Parametric  
Amplifiers

77154  
30V/100-5-1-7/26

Fig. 3. Current resonance curves in the signal circuit at a tuning out greater than the threshold value. The values of parameters:  $k = 0.03$ ;  $\beta_2 = 0.005$ ;  $\alpha_2 = 0.6$ ; (1)  $d_1 = d_2 = 0.001$ ; (2)  $d_1 = d_2 = 0.005$ ; (3)  $d_1 = d_2 = 0.01$ ; (4)  $d_1 = 0.05$ ;  $d_2 = 0.03$ ; (the dotted line is plotted for the nonregenerated circuit  $k = 0$ ;  $\beta = 0$ ;  $d = 0.05$ ).

Caption for Figure 3.

similar to Fig. 3 and 4 are given. (2) Resistance Introduced Into the Third Circuit. In order to examine the back effect of the signal and of the auxiliary circuits on the boosting circuit, the magnitudes  $I_1$  and  $I_2$ , as determined by Eqs. (3), are introduced into the equation of the pumping circuit of the system (1). After some transformations the following expression for the resistance carried in the third circuit is obtained:

Card 12/16

Some Problems In the Theory of Parametric  
 Amplifiers

77196

SOV/209-5-1-7/20

$$Z = \frac{\omega_3 I_0^2 (|V_1|^2 (R_2 - jX_2) \omega_2 + |V_2|^2 (R_1 - jX_1) \omega_1)}{(R_1^2 + X_1^2) (R_2^2 + X_2^2) - 2(R_1 R_2 + X_1 X_2) \omega_1 \omega_2 I_0^2 + \omega_1^2 I_0^2 I_0^2 + \omega_2^2 I_0^2 I_0^2} \quad (33)$$

The parametric regeneration of the oscillations in the signal and in the auxiliary circuits is possible only at the expense of the damping carried in the third circuit. The maximum magnitude of the active resistance of the third circuit is discussed. In conclusion the author says the following: In the study are calculated curves of the parametric coupling frequencies as function of retuning of the partial frequency of one of the circuits. It is shown that in the region of the tunings out, which satisfy the condition:

$$\omega_3 - \omega_1 - \omega_2 \leq k \sqrt{\omega_1 \omega_2}$$

Card 13/16

77194, SOV/10.1-5-1-7/20

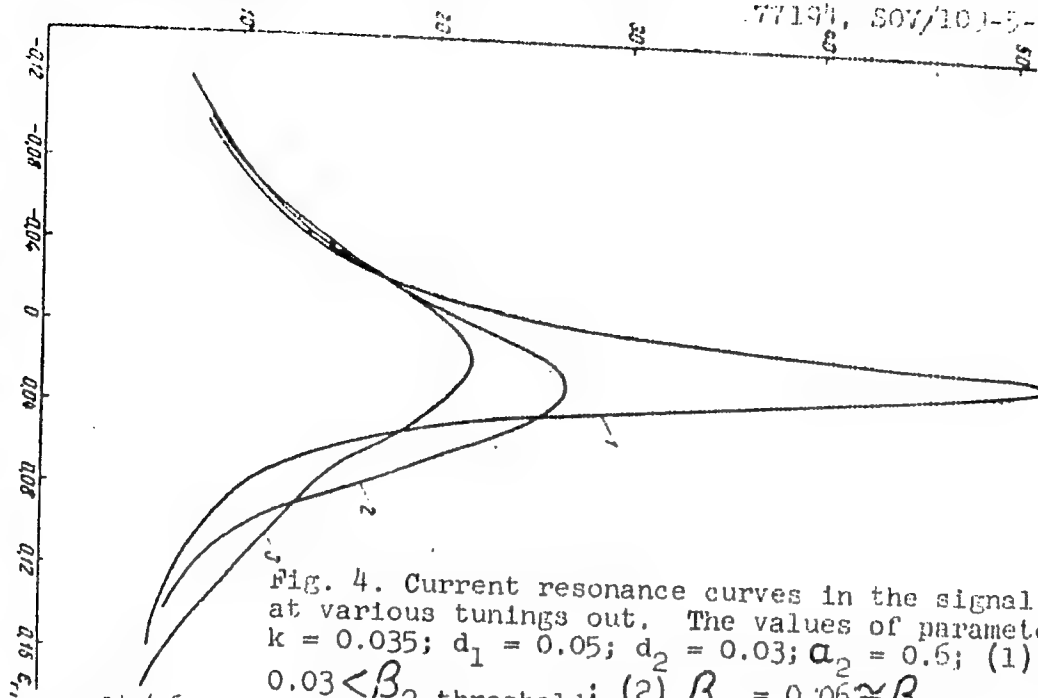


Fig. 4. Current resonance curves in the signal circuit at various tunings out. The values of parameters:  $k = 0.035$ ;  $d_1 = 0.05$ ;  $d_2 = 0.03$ ;  $a_2 = 0.6$ ; (1)  $\beta_2 = 0.03 < \beta_2 \text{ threshold}$ ; (2)  $\beta_2 = 0.06 \approx \beta_2 \text{ threshold}$ ; (3)  $\beta_3 = 0.096 > \beta_2 \text{ threshold}$ .

Card 14/16

Some Problems in the Theory of Parametric  
Amplifiers

77194  
SOV/109-5-1-7/20

A parametric excitation of oscillations in coupled circuits takes place. Inside this region frequencies of the parametric coupling coincide with the partial frequencies. On the boundaries of this region there is the greatest displacement between the parametric coupling frequencies and the partial frequencies. By tuning out of the sum of the partial frequencies from the tuning frequency, the effect of parametric excitation decreases, and even vanishes. This splits the current resonance curves of the circuits, causing a sufficiently small attenuation. The complex resistance carried in the pumping circuit was calculated. When the coupling reaches the threshold magnitude (i.e., the pumping amplitude equals the threshold magnitude), then the active resistance carried in the pumping circuit increases sharply. This leads to the increase in total attenuation, which takes place in the region of the frequencies that satisfy the equation:

Card 15/16

Some Problems in the Theory of Parametric  
Amplifiers

77194

SOV/100-5-1-7/20

$$\frac{x_1}{R_1} - \frac{x_2}{R_2} = 0.$$

Assistance of A. A. Pistol'kors and A. L. Mikaelyan is acknowledged. There are 6 figures; and 8 references, 3 Soviet, 5 U.S. The U.S. references are: H. Suhl, Proposal for a Ferromagnetic Amplifier in the Microwave Range, Phys. Rev., 1957, 105, 2, 384; H. Suhl, Theory of the Ferromagnetic Amplifier, J. Appl. Phys., 1957, 28, 11, 1225; M. T. Weiss, A Solid-State Microwave Amplifier and Oscillator Using Ferrites, Phys. Rev., 1957, 107, 1, 317; S. Bloom, K. K. N. Chang, Theory of Parametric Amplification Using Nonlinear Reactances, RCA Rev., 1957, 18, 4, 578; H. Heffner, G. Wade, Gain, Bandwidth and Noise Characteristic of the Variable-Parameter Amplifier, J. Appl. Phys., 1958, 29, 9, 1321.

SUBMITTED:  
Card 16/16

June 13, 1959

ZUBKOV, V.I.

Sublimation of solid balls in a gas flow. Dokl. AN SSSR 123  
no.5:803-805 D '58. (MIRA 12:1)

1. Odesskiy gosudarstvennyy universitet imeni I.I. Mechnikova.  
Predstavleno akademikom V.V. Shuleykinym.  
(Sublimation (Physical sciences))

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1  
CIA-RDP86-00513R002065520019-1"

ZUEKOV, V. I.

"Albino Birds," Priroda, No. 10, 1949.

ACC NO: AP7003493

SOURCE CODE: UR/0069/66/028/004/0573/0579

AUTHOR: Todes, O. M. Fedoseyev, V. A.; Zubkov, V. I.

ORG: Odessa University im. I. I. Mechnikov (Odesskiy universitet)

TITLE: Calculation of the rate of vaporization and growth of a drop (spherule)  
with allowance for variation in its temperature

SOURCE: Kolloidnyy zhurnal, v. 28, no. 4, 1966, 573-579

TOPIC TAGS: vaporization, vapor

ABSTRACT: In calculating the rate of vaporization of a drop, allowance has to be made for the fact that the concentration of saturated vapor at the surface of the drop corresponds to the surface temperature rather than the given temperature of the surrounding environment. Since the saturated vapor concentration is exponentially dependent on the temperature, the calculation of the surface temperature and the rate of vaporization requires the preliminary solution of a complex transcendental equation. The present article shows that, given certain simplifying assumptions and the introduction of several dimensionless parameters, this problem can be reduced to a universal equation whose solution can be tabulated or represented in the

Card 1/2

UDC: 541.18:536.423.1

0926 0029



L 1080048

ACC NR: AP7003498

form of a graph or nomogram. The same equation should also describe the process of drop growth in air and the process of vaporization or growth of a sublimable solid spherule. The vaporization and growth of a drop are considered both in the absence and in the presence of convection. In the first approximation the temperature drop between particle and flow is found to be independent of the rate of air-cooling. This conclusion and the calculated dependences were verified experimentally by measuring the rate of vaporization and cooling of vaporizing spherules and liquid drops of naphthalene. Orig. art. has: 4 figures, 18 formulas and 1 table.

[JPRS: 38,967]

SUB CODE: 20 / SUBM DATE: 29Mar65 / ORIG REF: 003

Card 2/2

ZUBOV, V.L.

Some data on the regional change in the velocity of the propagation of elastic waves in the deposits of sedimentary cover in Tatarstan. Izv. Kazan. Fil. AN SSSR. Ser. geol. Nauk to 11(1):87-95 1963.

Results of studying the velocity of the propagation of elastic waves in the rocks of crystalline basement in the Tatar A.S.S.R. Ibid.:96-101

(MIRA 18:6)

AUTHORS: Krinari, A. I. and Zubkov, V. L.

49-6-15/21

TITLE: On the characteristic of elastic properties of paleozoic rocks of Tataria. (K kharakteristike uprugikh svoystv gornykh porod paleozoya Tatarii).

PERIODICAL: "Izvestiya Akademii Nauk, Seriya Geofizicheskaya"  
(Bulletin of the Ac.Sc., Geophysics Series), 1957, No.6,  
pp. 813-817 (U.S.S.R.)

ABSTRACT: Extensive seismic prospecting is being carried out in Tataria. Reliable geological interpretation of the results cannot be obtained without knowing the elastic properties of the rocks of which the investigated region consists. Therefore, the Geological Institute of the Kazan Branch of the Ac.Sc. (Geologicheskii Institut Kazanskogo Filiala AN SSSR), in cooperation with the Kazan team of the Tatneftegeofizika Trust, carried out laboratory investigations of the elasticity of rock specimens taken from drilling cores of wells and from natural formations in Eastern Tataria. About 600 specimens encompassing the entire paleozoic section and all the lithological components of its rocks have been investigated. Ozerskaya, M.L. (1) and Tarkhov, A.G. (2) established that the rebound coefficient and the Young modulus are closely inter-related

Card 1/3

49-6-15/21

On the characteristic of elastic properties of paleozoic rocks of Tataria. (Cont.)

changes along the section of the region and to reveal certain general relations between the equivalent elasticity, the composition, the growth formation and certain features of the sediments. The obtained data will help to interpret correctly the results of seismic measurements. There are 3 figures and 2 tables and 2 Slavic references.

SUBMITTED: November 9, 1956.

ASSOCIATION: Kazan Branch of the Ac.Sc. Geological Institute.  
(Kazanskiy Filial Akademii Nauk SSSR Geologicheskii Institut).

AVAILABLE: Library of Congress  
Card 3/3

ZUBKO, V.M.; LIVSHITS, M.N.

Furniture industry of the Ukraine on the fortieth anniversary of the  
October Revolution. Der. prom. 6 no.11:11-13 N '57. (MIRA 10:11)

1. Gosplan USSR.

(Ukraine--Furniture industry)

1. ZUBKOV, V. M.  
2. USSR (600)  
4. Wharves  
7. Rational method of building the inclined portion of slips, Rech. transp., 12, No. 6, 1952.
9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ April, \_\_\_\_\_ 1953, Uncl.

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1

VERESHCHAGIN, L.F.; SEMERCHAN, A.A.; ZUBKOV, V.M.; KUZIN, N.N.

High-pressure and high-temperature apparatus with several pairs  
of lead-ins. Dokl.AN SSSR 145 no.1:71-72 J1 '62. (MIRA 15:7)

1. Institut fiziki vysokikh davleniy AN SSSR. 2. Chlen-korrespondent  
AN SSSR (for Vereshchagin).

(High-pressure research--Equipment and supplies)



JEK G  
S/020/62/145/001/009/018  
B104/B102

16000

AUTHORS: Vereshchagin, L. F., Corresponding Member AS USSR,  
Sumarchan, A. A., Zubkov, V. M., and Kuzin, N. N.

TITLE: High-pressure and high-temperature apparatus with several  
pairs of electric lead-in wires

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 1, 1962, 71-72

TEXT: Difficulties arising in the current feed to high-pressure apparatus were overcome by the device shown in Fig. 1. Specimen 4 is placed in a cylindrical container inside a high-pressure chamber 5. Two pistons 9 compress the specimen. During compression the pyrophyllite seals 2 enter the gaps ( $\sim 0.1$  mm) between the four sectors of pistons 9. The current is fed through the piston to the cylindrical graphite or metal container which is used as a furnace. The apparatus was calibrated for pressures of up to  $50,000 \text{ kg/cm}^2$  by making use of the jumps known to occur in the electric conductivity of Bi and Tl at certain temperatures. There are 3 figures.

Card 1/2

High-pressure and high-temperature...

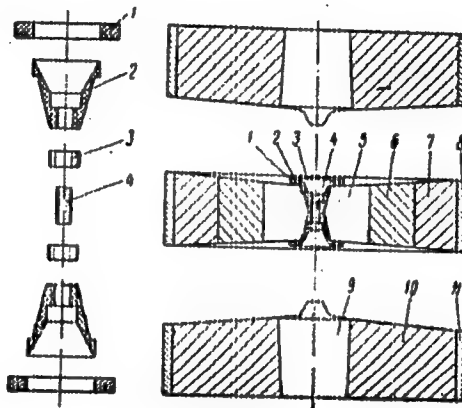
S/020/62/145/001/009/018  
B104/B102

ASSOCIATION: Institut fiziki vysokikh davleniy Akademii nauk SSSR  
(Institute of the Physics of High Pressures of the Academy  
of Sciences USSR)

SUBMITTED: March 20, 1962

Fig. 1. High-pressure apparatus.

Legend: (1) and (2) pyrophyllite  
seals; (3) ring for pressure  
transmission; (4) specimen;  
(5) high-pressure chamber.



Card 2/2

AUTHORS: Samoylyuk, N.D.; Povolotskiy, I.A.; Zubkov, V.N. SOV/19-58-6-50/685  
and Shchennikov, V.N.

TITLE: A Scraper Conveyor for Development Combine (Skreb-  
kovyy konveyer dlya nareznykh kombaynov)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 6, p 15 (USSR)

ABSTRACT: Class 5b, 12. Nr 113413 (585162 of 19 September  
1957). Submitted to the Committee for Inventions  
and Discoveries at the Ministers Council of USSR.  
A scraper conveyor for development mine workings,  
provided with an extendable chute frame with move-  
able chutes attached to the end head of the con-  
veyor which is connected by hinges to a sinking com-  
bine.

~~ZUBKOVA, Viktor Nikolayevich; KHARIN, A.I., redaktor; PIMCHENKO, S.I.,~~  
tekhnicheskly redaktor

[The struggle to raise labor productivity in the petroleum industry]  
Bor'ba za povyshenie proizvoditel'nosti truda na neftepromysle.  
[Grozny] Groznenskoe kn-vo, 1955. 48 p. [Microfilm] (MLHA 10:2)  
(Labor productivity) (Petroleum industry)

ACC NR: AP7001404

(A,N)

SOURCE CODE: UR/0413/66/000/021/0093/0093

INVENTOR: Zubkov, V. P.

ORG: none

TITLE: A method of casting thin-wall parts. Class 31, No. 187954

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 93

TOPIC TAGS: thin wall article, thin wall article casting, molten metal, metal casting

ABSTRACT: This Author Certificate introduces a method of casting thin-wall parts in which the mold is filled with molten metal when submerged in a metal bath, and the excess of metal is squeezed out by closing the half molds. To improve the casting quality and to control the mold filling, the mold is opened below the metal surface at a depth exceeding the height of casting. [WW]

SUB CODE: 13/ SUBM DATE: 14Dec64/ ATD PRESS: 5110

Card 1/1

UDC: 621.746.58

ZAK, P.S.; ZHURAVLEV, V.L.; ROMANOV, V.A., otv.red.; SADOMOV, N.T.,  
red.; GOTOVTSEV, A.A., red.; GRINBERG, A.Ya., red.; ZUEKOV, V.T.,  
red.; KOQAN, A.M., red.; KRUGLIKOV, A.V., red.; HARBUN, K.K.,  
red.; NAZIMOV, N.M., red.; NEYMARK, A.M., red.; MOTYAKHOV, M.A.,  
red.; SPEVAK, V.Ya., red.; TEMENBAUM, M.M., red.; SHNEYDER, M.I.,  
red.; ALADOVA, Ye.I., tekhn.red.; SHKLYAR, S.Ya., tekhn.red.

[Design and manufacture of globoid gears] Proektirovaniye i  
izgotovleniye globoidnykh peredach. Moskva, Ugletekhnizdat, 1958.  
87 p. (Tekhnologiya ugol'nogo mashinostroeniya, no.2).

(MIRA 13:2)

(Gearing)

ZUBKOV, Vasil'y Vasil'yevich; PETROV, V.F., otv. red.; KACHALIKINA,  
Z.I., red. izd-va; OVSEYENKO, V.G., tekhn. red.; SHKILYAR,  
S.Ya., tekhn. red.

[Brief course in general petrography] Kratkii kurs obshchei  
petrografii. 3 izd., perer. i dop. Moskva, Gosgortekhnizdat,  
1962. 237 p. (MIRA 15:10)

(Petrology)

CHARYGIN, Mikhail Mikhailovich, prof.; KHAIN, V.Ye., prof., doktor geologo-  
mineralog.nauk, retsentsent; ZUBKOV, V.V., red.; PERSHINA, Ye.G.,  
vedushchiy red.; POLOSINA, A.S., tekhn.red.

[General geology] Obshchaya geologiya. Izd.2., perer. i dop.  
Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry,  
1959. 390 p. (MIRA 12:10)

(Geology)



A short course in general petrography; text-book. Moskva, Ugletekhizdat, 1950.  
221 p. (50-38756)

QE431.Z9

1. Petrology.

ZUBKOV, Vasil'y Vasil'yevich; GUSEL'NIKOV, I.I., otvetstvennyy redaktor;  
NIKOV, N.A., redaktor izdatel'stva; KOROVENKOVA, Z.A., tekhnicheskiiy redaktor; ALADOVA, Ye.I., tekhnicheskiiy redaktor

[Brief course in general petrology] Kratkii kurs obshchei petrografii.  
Izd. 2-oe, perer. i dop. Moskva, Ugletekhizdat, 1956. 255 p.

(Petrology)

(MLRA 10:8)

CHARYGIN, Mikhail Mikhaylovich, professor; ZUBKOV, Y.V., kandidat geologo-  
mineral'nykh nauk, dotsent, retsenzent; KAZAKOV, M.P., redaktor;  
PERSHINA, Ye.G., redaktor; POLOSINA, A.S., tekhnicheskii redaktor

[General geology] Obshchaya geologiya. Moskva, Gos.nauchno-tekhn.  
izd-vo nef'tianoi i gorno-toplivnoi lit-ry, 1956. 392 p. [Microfilm]  
(Geology) (MIRA 9:3)

ZUBKOV, Ya.S.; MOSKOVKIN, I.V.; EDERL'MAN, Ya.A.; YAKOVLEV, V.A.

Efficient functioning of bits. Neft. khoz. 41 no. 11:57-59  
N '63. (MIRA 17:7)

ZUBKOV, Ye.; KHRANOV, N., veterinarnyy vrach

How we use food scraps to fatten swine. Sov.torg. 33 no.7:  
24-26 J1 '60. (MIRA 13:7)

1. Direktor podsobnogo khozyaystva, Kherson.  
(Garbage as feed)  
(Swine--Feeding and feeds)

ZUEKOV, Ye.F.

Remarks on "atmospheric phenomena" and "unusual phenomena".  
Meteor. i gidrol. no.4:65-66 Ap '62. (MIRA 15:5)  
(Meteorology—Observations)

SHKLYAYEV, A.S., kand.geograf.nauk (Perm'); ZUBKOV, Ye.F., kand.geograf.-  
nauk (Perm')

Early spring. Priroda 51 no.4:127-128 Ap '62. (MIRA 15:4)  
(Russia, Northern--Spring)

How many blowout preventers should be used. Neftianik 6  
no.12:9-10 D '61. (MIRA 14:12)

1. Glavnyy inzh. tresta Permafterasvodka.  
(Oil wells. Equipment and supplies)



ZUBKOV, Ye.F., kand.geograf.nauk; SKHLYAYEV, A.S., kand.geograf.nauk

Winter in the Kama Valley. Priroda 50 no.12:122 D '61.  
(MIRA 14:12)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo.  
(Kama Valley--Winter)

ZUBKOV, Ye.F. (Perm'); SHKLYAYEV, A.S. (Perm')

In the Kama region. Priroda 51 [i.e. 52] no.5:128 '63.  
(Kama region—Spring) (MIRA 16:6')

ZUBKOV, Ye.F.

Using pin roller bits in fields of the Perm Economic Region.  
Neft. khoz. 40 no.11:66-69 N '62. (MIRA 16:7)

(Perm Province—Oil well drilling—Equipment  
and supplies)

**ZUBKOV, Yevteniy Fedorovich**

[Agricultural climatology of Molotov Province and periods for  
field work] Agroklimat Molotovskoi oblasti i sroki polavnykh rabot.  
Molotov. Molotovskoe knizhnoe izd-vo, 1956. 82 p. (MIRA 11:4)  
(Perm Province--Crops and climate)

ZURKOV, Ye.M. Grad. Geog. Sci--(1954) "Agroclimatic conditions of  
Penzance Oblast and their <sup>significance</sup> ~~evaluation~~ in ~~the~~ agricultural production."  
Part 1, 1958. 15 pp. (Min. of Higher Education USSR. Part 1 State I in  
A.M. Gor'diy), 165 copies (IL, 45-58, 143)

ZUBKOV, Ye.P.;KHRENOV, N.M.,vetvrach;GORDIYENKO, N.A.

Vaccination of swine against cholera and erysipelas over a brief  
period of time. Veterinariia 36 no.11:18-18 N '59 (MIRA 13:3)

1. Direktor svinootkormochnogo khozyaystva g. Kherson (for Zubkov).
2. Direktor mezhsovkhoznoy vetbaklaboratorii, g. Kherson (for Gordi-  
yenko).

(Hog cholera) (Erysipeloid) (Vaccination)  
(Swine—Diseases and pests)

ZUBKOV, Yu., kand. iskusstvovedeniya

Theator and actor. Sov.shakht. 10 no.3:43-44, M. '61.

(MIRA 14:7)

(Theater)

"APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1"

ZUBKOV, Yur., kand. iskusstvovedeniya

Our fellow-soldier. Sov. voyn 43 no.22:44 N '61. (MIRA 15:2)  
(Moscow--Theater)



8(0)

SOV/112-59-3-4278

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 3, p 4 (USSR)

AUTHOR: Zubkov, Yu. D.

TITLE: Development of Raw-Energy Sources in Kazakhstan After the Great  
October Socialist Revolution (Razvitiye energeticheskoy bazy Kazakhstana  
posle Velikoy Oktyabr'skoy sotsialisticheskoy revolyutsii)

PERIODICAL: Tr. Kazakhsk. s.-kh. in-ta, 1957, Nr 7, pp 137-141

ABSTRACT: Bibliographic entry.

Card 1/1

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1  
CIA-RDP86-00513R002065520019-1"

ZUBKOV, Yu. D.

Induction Generators With Capacitor Excitation" (Asinkhronnye generatory  
s kondensatornym возбуждением), AS Kazakh SSR, 112 pp.

ZUBKOV, Yur.

Heroic emotions on the stage of army and navy theaters! Koma.  
Vooruzh, Sil 4 no.14:88-92 J1 '64. (MIRA 17:9)

ZUBKOV, Yu.S., inzh.

Attachment to the PPSF-300-2 semiautomatic torch for underwater cutting.  
Svar.proizv. no.10:37-38 0 '64. (MIRA 18:1)

**ZUBKOVA, A.I.**

**Periarticular autoblood injections for treating habitual dislocations  
of the shoulder. Ortop., travm. i protes. 17 no.3:67 My-Je '56.**

(MIRA 9:12)

**1. Iz Saratovskogo nauchno-issledovatel'skogo instituta vosstanovi-  
tel'noy khirurgii, travmatologii i ortopedii (dir. - dotsent Ya.N.  
Rodin)**

**(SHOULDER JOINT--DISLOCATION) (BLOOD--TRANSFUSION)**

1st AND 2ND LETTER

1st AND 2ND LETTER

1st AND 2ND LETTER

1st AND 2ND LETTER

AUTHOR INDEX

AUTHOR INDEX

TECHNICAL INVESTIGATION CLASSIFICATION

Zubkova, A. B. TECHNOLOGICAL INVESTIGATION OF  
THE SAKHAROVSK CLAYS. *Ogneupory*, 5, 883-891 (1937)  
The clays from these deposits in the region of Moscow are  
well suited for the production of gray brick. High grade  
refractory products could be made. The SiO<sub>2</sub> content is  
44.15 to 61.45%; the Al<sub>2</sub>O<sub>3</sub> content is 14.15 to 22.22%.

1st AND 2ND LETTER

1st AND 2ND LETTER

1st AND 2ND LETTER

19

Technological investigation of the Sauerbruch clays. A. E. Zulfarina. *Ogneuprav* 5, 885-9 (1937); *Chem. Zvest.* 1937, 1, 891. The clays from these deposits in the region of Moscow are well suited for the production of good brick. High-grade refractory products could be made. The  $\text{SiO}_2$  content is 44.48-61.35%; the  $\text{Al}_2\text{O}_3$  23.56-38.22%. M. G. Moore

A S T M METALLURGICAL LITERATURE CLASSIFICATION

電話：070-4645100

7월 22일(목) 10:30 ~ 11:30

電話：(02) 2311-1111

1154 6806 25

圖書出版事業 社會科學 文學藝術 自然科學 工業技術

KARPENKO, V.V., kand.tekhn.nauk; KHATSINOV, M.I., kand.tekhn.nauk;  
TVERSKOY, M.I. [Tvers'koi, M.I.], kand.tekhn.nauk; ZUHKOVA, A.S., inzh.

Grip for removing ensilage. Mekh. sel'. hosp. 9 no.9:20-21 S '58.  
(Hoisting machinery) (Ensilage) (MIRA 11:10)



ZUBKOVA

"APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1  
CIA-RDP86-00513R002065520019-1"

Zubkova, A. E. Technological investigations of  
the city from these deposits in the region of Moscow are  
well suited for the production of slag brick. High-grade  
refractory products could be made. The slag content is  
44.18 to 61.25 %, the Al<sub>2</sub>O<sub>3</sub> 22.50 to 38.22 %.

APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1  
CIA-RDP86-00513R002065520019-1"



APPROVED FOR RELEASE: Thursday, September 26, 2002  
APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1  
CIA-RDP86-00513R002065520019-1

1982 1983 1984 1985 1986 1987

1988 1989 1990 1991 1992 1993

1994 1995 1996 1997 1998 1999

Card 2 -

1. ZURKOVA, D.
2. USSR (600)
4. Udmurt A.S.S.R. - Amateur Art Activities
7. Artists of the Udmurt A.S.S.R. Klub, No. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

2. USSR (600)

4. Amateur Art Activities - Udmurt A.S.S.R.

7. Artists of the Udmurt A.S.S.R. Klub no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Incl.

29169 ZUBKOVA, D. I ZAMYATIN, N.

K. Voprosu mezhpородnogo skreshchivaniya sviney v Belorussii. Izvestiya  
Akad-nauk BSSR, 1949, No. 4, s. 139-44

SO: Letopis' Zhurnal'nykh Statey, Vol. 39, 1949

ZUBKOVA, D.K.

On the verge; a popular scientific film. Zdorov'ye 1 no.6:30 Je. '55.

(MIRA 9:5)

(ALCOHOLISM)



Swine Breeding

Raising pigs. Sots. zhiv. 14 no. 4, 1952

Monthly List of Russian Accessions, Library of Congress, July 1952. Unclassified.

ZUBKOVA, D. P.

Swine

Raising pigs on the Stalin Collective Farm. Sots.zhiv. 14, No. 9, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

- [illegible]

ZUEKOVA, D, APPROVED FOR RELEASE: Thursday, September 26, 2002

CIA-RDP86-00513R002065520019-1"

Art-Study And Teaching

"Creative work of amateur artists" Klub, No. 4, 1952

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified

1. MEYERSON, G.S., ZVEREV, G.O., ZUBKOVA, F.M.

2. USSR (600)

Moscow Institute of Fine Chemical Technology, "Study of the Solubility of Complex Tantalum Fluoride," Tsvet. Met. 14, No 8, August 1939.

9. ~~SECRET~~ Report U-1506, 4 Oct 1951.



CA.

**Oxygen consumption during lysis of bacteria.** L. P. Zubkova... *Biochimiya* 1, 481-4 (1936).-- A strongly marked increase in the rate of O absorption was observed immediately after adding lysozyme to a bacterial suspension of *M. lysodeikticus*. The greatest increase, about 200%, took place during the first 10-20 min after the addn. of the lysozyme. H. Cohen

ASNT-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM: 570.8340

1174 1004.90

00687 CAS OCT 196

Zubkova, G. A.

M.

USSR/Cultivated Plants - Fodder.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15660

Author : G.A. Zubkova, A.V. Kalinova, Z.I. Kartashova, T.I.  
~~Prikho'ko~~

Inst : Stavropol'skiy Agricultural Institute.

Title : The Calcium and Phosphorus Content in Perennial and  
Annual Grass Hay During the Harvest.  
(Soderzhaniye kal'tsiya i fosfora v sene mnogoletnikh  
i odnoletnikh trav po ukosam).

Orig Pub : Sb. nauchn.-issled. rabot stud. Stavropol'sk. s.-kh. in-  
t, 1956, vyp. 4, 86-88.

Abstract : The Stavropol'skiy Agricultural Institute studied the  
Ca and P content upon harvesting of alfalfa, sainfoin,  
wither rye and rye-grass hay. The richest in Ca of the  
bean bearing grass hay were alfalfa (15.9-20.0 grams

Card 1/2



ZUBKOVA, K.A.

Cleaning of spinnerets by water under pressure. Khim.volok.  
no.4:65 '59. (MIRA 13:2)

1. Barnaul'skiy zavod,  
(Spinning machinery)

MALKINA, Kh.E.; KRASOTINA, A.N.; Prinimali uchastiye: ZUBKOVA, I.A.;  
RYZHKOVA, K.A.; SALOMASOVA, A.M.

Compounding formula, manufacture, and uses of carbon black-free  
lubricants for vulcanization molds. Kauch.i rez. 20 no.7:30-33  
Jl '61. (MIRA 14:6)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.  
(Vulcanization--Equipment and supplies)  
(Lubrication and lubricants)

ZURKOVA, I.D.

Scheme of drifts in the coastal zone over a flat sloping bottom  
as influenced by the direction and velocity of the wind. Trudy  
MOI 15143-55 '59, (MIRA 1216)  
(Ocean currents)

ZUBKOVA, I.G.

Anatomical structure of the petiole in the family  
Vitaceae Juss.; its taxonomic and evolutionary significance.  
Bot.zhur. 50 no.11:1556-1567 N '65. (MIRA 19:1)

1. Botanicheskiy institut imeni V.L.Komarova AN SSSR,  
Leningrad. Submitted April 13, 1965.

EL' VARDANI, S.A. [El Wardani, S.A.]; ZUBKOVA, I.M. [translator];  
YEZDROVA, V.I. , referent

On the geochemistry of germanium (from "Geochimica et Cosmochimica  
Acta," 13, No.1). Biul.nauch.-tekhn.inform.VIMS no.1:12-14 '60.  
(MIRA 15:5)

1. Otdel nauchno-tekhnicheskoy informatsii Vsesoyuznogo nauchno-  
issledovatel'skogo instituta mineral'nogo syr'ya.  
(Germanium)

OBREY, K.V. [Aubrey, K.V.]; ZUBKOVA, I.M. [translator]

Germanium in coal and in some of its by-products (from "Revue de  
l'Industrie Minérale," 40, special issue, July 1958). Biul.nauch.-  
tekh.inform.VIMS no.1:7-12 '60. (MIRA 1515)

1. Otdel nauchno-tekhnicheskoy informatsii Vsesoyuznogo nauchno-  
issledovatel'skogo instituta mineral'nogo syr'ya.  
(Germanium)

ALEKSANIAN, M.S. [Alexanian, M.S.]; ZUBKOVA, I.M. [translator]

Determination of the germanium content in coals of the Aquitaine Basin (France) (from Revue de l'Industrie Minérale, 40, special issue, 1958). Biul.nauch.-tekh.inform.VIMS no.1:71-72 '60.  
(MIRA 15:5)

1. Otdel nauchno-tekhnicheskoy informatsii Vsesoyuznogo nauchno-issledovatel'skogo instituta mineral'nogo syr'ya.  
(Aquitaine Basin—Germanium)

LAPITSKAYA, O.I.; ZUBKOVA, K.A.

Experience in acetylene production by high-temperature  
hydrocarbon pyrolysis. Nefteper. i neftekhim. no.1:34-  
39 '63. (MIRA 16:10)

1. Bashkirskiy nauchno-issledovatel'skiy institut nef'tyanoy  
promyshlennosti i Ufimskiy khimicheskoy zavod.



APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1

APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1  
APPROVED FOR RELEASE: Thursday, September 26, 2002 CIA-RDP86-00513R002065520019-1"

ACCESSION NR: AT3009262

S/2744/63/000/006/0186/0194

AUTHORS: Lapitskaya, O. I.; Zubkova, K. A.

TITLE: Experiment for obtaining acetylene by high-temperature pyrolysis in a tubular furnace.

SOURCE: Ufa. Bashkirskiy nauchno-issled. institut po pererabotke nefti. Trudy\*, no. 6, 1963. Sernisty\*ye nefi i produkty\* ikh pererabotki, 186-194.

TOPIC TAGS: acetylene, acetylene production, butane pyrolysis, tubular furnace design, pyrolysis.

ABSTRACT: The optimum conditions were investigated for pyrolysing butane to acetylene in a tubular furnace in the installation shown in a figure. Modifications are suggested, such as the use of Kh25T (instead of 1Kh18NGT) nipples on the burners, and the addition of collector-type plates in the cooling apparatus. Optimum raw materials: water vapor ratio is 1 : 2.2-2.4, lower ratio causing coking. The dependence of coking on pyrolysis and on preheating temperatures is discussed. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: none

Card ~~1~~/2

LAFITSKAYA, O.I.; ZUBKOVA, K.A.

Preliminary data on obtaining acetylene by high-temperature pyrolysis  
in a tubestill. Trudy Bash NIINP no.5:180-189 '62.

(MIRA 17:10)